

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-36. (Cancelled)

37. (Currently Amended) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles have a diameter of at least about 100 microns.

38. (Original) The composition of claim 37, wherein the carrier fluid comprises a saline solution.

39. (Original) The composition of claim 37, wherein the carrier fluid comprises a contrast agent.

40. (Original) The composition of claim 37, wherein the plurality of particles has an arithmetic mean diameter of about 3,000 microns or less.

41. (Original) The composition of claim 37, wherein the plurality of particles has an arithmetic mean diameter of about ten microns or more.

42. (Previously Presented) The composition of claim 37, wherein the carrier fluid comprises a surfactant.

43. (Previously Presented) The composition of claim 37, wherein the interior region is substantially devoid of the polymer.

44. (Previously Presented) The composition of claim 37, wherein the interior region comprises at most about 50 weight percent of the polymer.

45. (Previously Presented) The composition of claim 44, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the polymer.

46. (Previously Presented) The composition of claim 37, wherein the interior region comprises at least about 0.1 weight percent of the polymer.

47. (Previously Presented) The composition of claim 37, wherein the surface region comprises at least about 0.1 weight percent of the polymer.

48. (Previously Presented) The composition of claim 48, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the ~~first~~ polymer.

49. (Previously Presented) The composition of claim 37, wherein the surface region comprises at most about 100 weight percent of the polymer.

50. (Previously Presented) The composition of claim 37, wherein the difference between the weight percent of the polymer in the interior region and the weight percent of the polymer at the surface region is at least about 30 weight percent.

51. (Cancelled).

52. (Previously Presented) The composition of claim 37, wherein the plurality of particles have a diameter of at most about 2,500 microns.

53. (Previously Presented) The composition of claim 37, wherein the polymer comprises a halogenated polymer.

54. (Previously Presented) The composition of claim 37, wherein the polymer comprises a fluorinated polymer.

55. (Previously Presented) The composition of claim 37, wherein the polymer comprises a backbone and side groups that are more polar than the backbone.

56. (Previously Presented) The composition of claim 37, wherein the polymer has a molecular weight of from about 500 to about 15,000.

57. (Previously Presented) The composition of claim 37, wherein the polymer is substantially linear.

58. (Previously Presented) The composition of claim 37, wherein the polymer has the formula  $D-B-[O-(A-O)_n-B]_m-D$ , in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20.

59. (Previously Presented) The composition of claim 58, wherein O comprises a member selected from the group consisting of polyurethanes, polyureas, polyamides, polyalkylene oxides, polycarbonates, polyesters, polylactones, polysilicones, polyethersulfones, polyolefins, polyvinyls, polypeptide polysaccharides, and ether and amine linked segments thereof.

60. (Previously Presented) The composition of claim 59, wherein A comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

61. (Previously Presented) The composition of claim 58, wherein B comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

62. (Previously Presented) The composition of claim 61, wherein B further comprises a functional group selected from the group consisting of esters, carboxylic acid salts, sulfonic acid salts, phosphonic acid salts, thiols, vinyls, and secondary amines.

63. (Previously Presented) The composition of claim 58, wherein D comprises  $\text{CF}_3(\text{CF}_2)_p\text{CH}_2\text{CH}_2-$ , wherein p is from two to 20.

64. (Previously Presented) The composition of claim 58, wherein D comprises  $\text{CF}_3(\text{CF}_2)_m(\text{CH}_2\text{CH}_{20})_q-$ , wherein m is from one to 20 and q is from one to ten.

65. (Previously Presented) The composition of claim 64, wherein the plurality of particles further comprise a therapeutic agent.

66. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a therapeutic agent.

67. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise an additional polymer.

68. (Currently Amended) The composition of claim 67, wherein the additional polymer comprises a member selected from the group consisting of polyvinyl alcohols, polyacrylic acids, polymethacrylic acids, poly vinyl sulfonates, carboxymethyl celluloses, hydroxyethyl celluloses, ~~substituted~~ celluloses, polyacrylamides, polyethylene glycols, polyamides, polyureas, polyurethanes, polyesters, polyethers, polystyrenes, polysaccharides, polylactic acids, polyethylenes, polymethylmethacrylates, polycaprolactones, polyglycolic acids, poly(lactic-co-glycolic) acids, and combinations thereof.

69. (Previously Presented) The composition of claim 67, wherein the plurality of particles further comprise a therapeutic agent.

70. (Previously Presented) The composition of claim 69, wherein the therapeutic agent is bound to the polymer.

71. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a polysaccharide.

72. (Previously Presented) The composition of claim 37, wherein the plurality of particles are substantially spherical.

73. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a coating disposed over the surface region.

74. (Previously Presented) The composition of claim 73, wherein the coating is bioabsorbable.

75. (Previously Presented) The composition of claim 37, wherein the plurality of particles comprise from about 0.25 weight percent to about 50 weight percent of the polymer.

76. (Previously Presented) The composition of claim 37, wherein the plurality of particles comprise from about 15 weight percent to about 35 weight percent of the polymer.

77. (Previously Presented) The composition of claim 37, wherein the interior region has a density of large pores and the surface region has a density of large pores, and the density of large pores of the interior region is greater than the density of large pores at the surface region.

78. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region comprises at most about 50 weight percent of the polymer.

79. (New) The composition of claim 78, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the polymer.

80. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region comprises at least about 0.1 weight percent of the polymer.

81. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the surface region comprises at least about 0.1 weight percent of the polymer.

82. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having

a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,  
wherein the polymer comprises a halogenated polymer.

83. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,  
wherein the polymer comprises a backbone and side groups that are more polar than the backbone.

84. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and



a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the polymer has a molecular weight of from about 500 to about 15,000.

85. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the polymer has the formula  $D-B-[O-(A-O)_n-B]_m-D$ , in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20.

86. (New) The composition of claim 85, wherein O comprises a member selected from the group consisting of polyurethanes, polyureas, polyamides, polyalkylene oxides, polycarbonates, polyesters, polylactones, polysilicones, polyethersulfones, polyolefins, polyvinyls, polypeptide polysaccharides, and ether and amine linked segments thereof.

87. (New) The composition of claim 86, wherein A comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

88. (New) The composition of claim 85, wherein B comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

89. (New) The composition of claim 88, wherein B further comprises a functional group selected from the group consisting of esters, carboxylic acid salts, sulfonic acid salts, phosphonic acid salts, thiols, vinyls, and secondary amines.

90. (New) The composition of claim 85, wherein D comprises  $\text{CF}_3(\text{CF}_2)_p\text{CH}_2\text{CH}_2-$ , wherein p is from two to 20.

91. (New) The composition of claim 85, wherein D comprises  $\text{CF}_3(\text{CF}_2)_m(\text{CH}_2\text{CH}_2)_q-$ , wherein m is from one to 20 and q is from one to ten.

92. (New) The composition of claim 91, wherein the plurality of particles further comprise a therapeutic agent.

93. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles further comprise a therapeutic agent.

94. (New) The composition of claim 93, wherein the therapeutic agent is bound to the polymer.

95. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles further comprise a polysaccharide.

96. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles are substantially spherical.

97. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having

a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,  
wherein the plurality of particles comprise a coating over the surface region.

98. (New) The composition of claim 97, wherein the coating is bioabsorbable.

99. (New) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region has a density of large pores and the surface region has a density of large pores, and the density of large pores of the interior region is greater than the density of large pores at the surface region.